Updated 8 Items in the Draft Final Options for Preparing Delaware for Sea Level Rise for Discussion on May 23

Submitted by Chad Tolman on May 22, 2013 for LWV/DelPL

Note: The item numbers correspond to those used in the Draft Final Options.

Provide Increased Regulatory Flexibility for Adaptation and Improve Consistency between Regulatory Agency Decisions

10. Strongly encourage regional planning agencies and DelDOT to work together on early transportation planning and conceptual infrastructure design for sea level rise adaptation.

11. Facilitate ~~Allow for~~ the connection of individual septic systems to community waste water treatment ~~septic~~ systems with excess capacity when human safety and welfare are at risk.

16. Incorporate sea level rise implications in future updates to the state Coastal Zone Act regulations. At some future time it may be necessary to consider redefining the boundary of the state's Coastal Zone as described in the CZA of 1971; however no change is needed at this time. Delaware's Coastal Zone Act prohibits new heavy industrial uses in the coastal zone and requires permits and environmental offset projects for modifications to existing heavy industrial facilities. Existing heavy industry in the coastal zone is very important to Delaware's economy; these facilities should be allowed the flexibility to adapt to sea level rise. Sea level rise considerations, including the potential future need for shoreline improvements, drainage improvements and facility upgrades, should be included in any future regulatory updates.

Provide Consistent and Predictable Policies for Future Growth, Investment, and Natural Resource Management

20. Incorporate sea level rise considerations into municipal and county comprehensive development plans. State law requires that every municipality in Delaware develop, and periodically update, a comprehensive development plan. These plans contain a municipal development strategy that includes expansion of boundaries, future plans for residential and commercial growth, and future infrastructure investments, among others. It also contains environmental and demographic information. Requiring the plans to include a discussion of potential sea level rise impacts and potential adaptation actions

would ensure that all municipalities in the state were proactively considering sea level rise in their future plans for growth and development and may allow for increased communication about sea level rise between municipal, county and state governments.

24. Develop a statewide retreat plan and update it periodically. There are certain locations within the state where "retreat" may be the best adaptation strategy, including some natural areas, agricultural areas and developed areas where protection may not be feasible due to expense or engineering constraints. There is a desire from businesses, citizens and state agencies to have predictability in adaptation responses so that they can make long term plans. A statewide plan outlining areas where retreat may be the most appropriate adaptation option would allow state agencies to put lifespan limits on infrastructure in vulnerable areas, allows targeted land acquisition for inland migration of wetlands and shorelines, and would provide predictability for citizens. Significant new data about adaptation costs, shoreline responses to sea level rise and demographic information would be required before a retreat strategy could be researched and crafted. Any retreat plan would also require significant dialogue with elected officials and citizens.

29. Develop comprehensive wetlands restoration, protection and retreat strategies in response to sea level rise. A comprehensive wetlands restoration strategy for the state is necessary given the anticipated impacts from sea level rise. The strategy should include identification of uplands for preservation and acquisition to provide areas for marsh migration; preventing the construction of structures that would act as barriers to migration; wetland restoration techniques to allow wetlands to keep pace with sea level rise; cataloging of pertinent research needs; policy and regulatory changes; and an outreach strategy. Specific ideas that could also be incorporated include- evaluating phragmites control techniques, beneficial re-use of sediment, and rolling easements.

Increase Public Awareness of Sea Level Rise through Education, Outreach and Marketing

33. Develop a comprehensive outreach strategy to educate all Delawareans ~~public~~ about sea level rise. A comprehensive outreach strategy should be developed to increase Delaware's understanding of sea level rise and how it may potentially affect many aspects of life in this state as well as the ways to reduce these impacts. A strategy may include collection of input about the best way to reach different audiences. Education efforts should include both year round and seasonal residents, children,

government officials, businesses, farmers, real estate agents, insurance agents, utilities and industries so informed decisions can be made in the future. Increased education would engage more agencies and funding sources and may result in support that can help integrate sea level rise in long-term management plans, acceptance of the management decisions made, and possibly influence legislative decision making. Providing information about other successful sea level rise programs and initiatives may further assist in Delaware's acceptance of sea level rise and successful ways that impacts were mitigated through adaptation strategies.

35. Improve the ~~ability of~~ level of information provided to homebuyers ~~to investigate~~ regarding a property's potential vulnerability to sea level prior to purchase. Homebuyers' access to information about future sea levels should be improved through development of a comprehensive website that illustrates current flooding and future sea level rise inundation risks. Prospective buyers should be informed by the state about the existence and nature of the web site, which should be updated from time to time with the latest projections of how the relative sea level at the Delaware Coast is expected to change with time - along with an estimate of the uncertainties - based on the best available science. In addition, prospective homeowner understanding of flood risks should be increased through increased interactions with local city planners. For example, the City of Newark has a successful program where prospective homeowners meet with land use planners prior to purchase to review the property and surrounding land uses. A similar model could be employed in other municipalities and could include sea level rise information.